SY-P4I845PE
Motherboard

Quick Start Guide

Introduction

Hardware Installation

Quick BIOS Setup

The SOYO CD

Davicom Onboard LAN Driver

Highpoint hpt371 Driver Installation

SOYO™

SY-P4I845PE Motherboard

mPGA Socket 478 processors
Intel 845PE AGP/PCI Motherboard
533/400 MHz Front Side Bus supported
ATX Form Factor

P4I845PE Serial - Version P1.0 - Edition: October 2002

* These specifications are subject to amend without notice

1 *Introduction*

Congratulations on your purchase of the **SY-P4I845PE** Motherboard. This *Quick Start Guide* illustrates the steps for installing and setting up your new Motherboard.

This guide provides all users with the basic steps of Motherboard setting and operation. For further information, please refer to the *SY-P4I845PE Motherboard User's Manual* that came with your Motherboard.

Unpacking

When unpacking the Motherboard, check for the following items:

◆   The SY-P4I845PE Intel 845PE AGP/PCI Motherboard
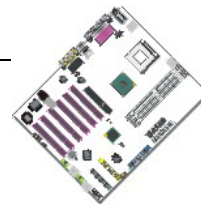
◆   This Quick Start Guide

◆   The Installation CD-ROM

◆   SOYO Bonus Pack CD-ROM

◆   Two IDE Device ATA 100 Flat Cable
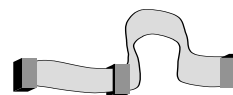
◆   One Floppy Disk Drive Flat Cable
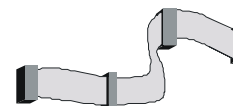
◆   One Heat Sink Compound

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Introduction

SY-P4I845PE Motherboard Layout
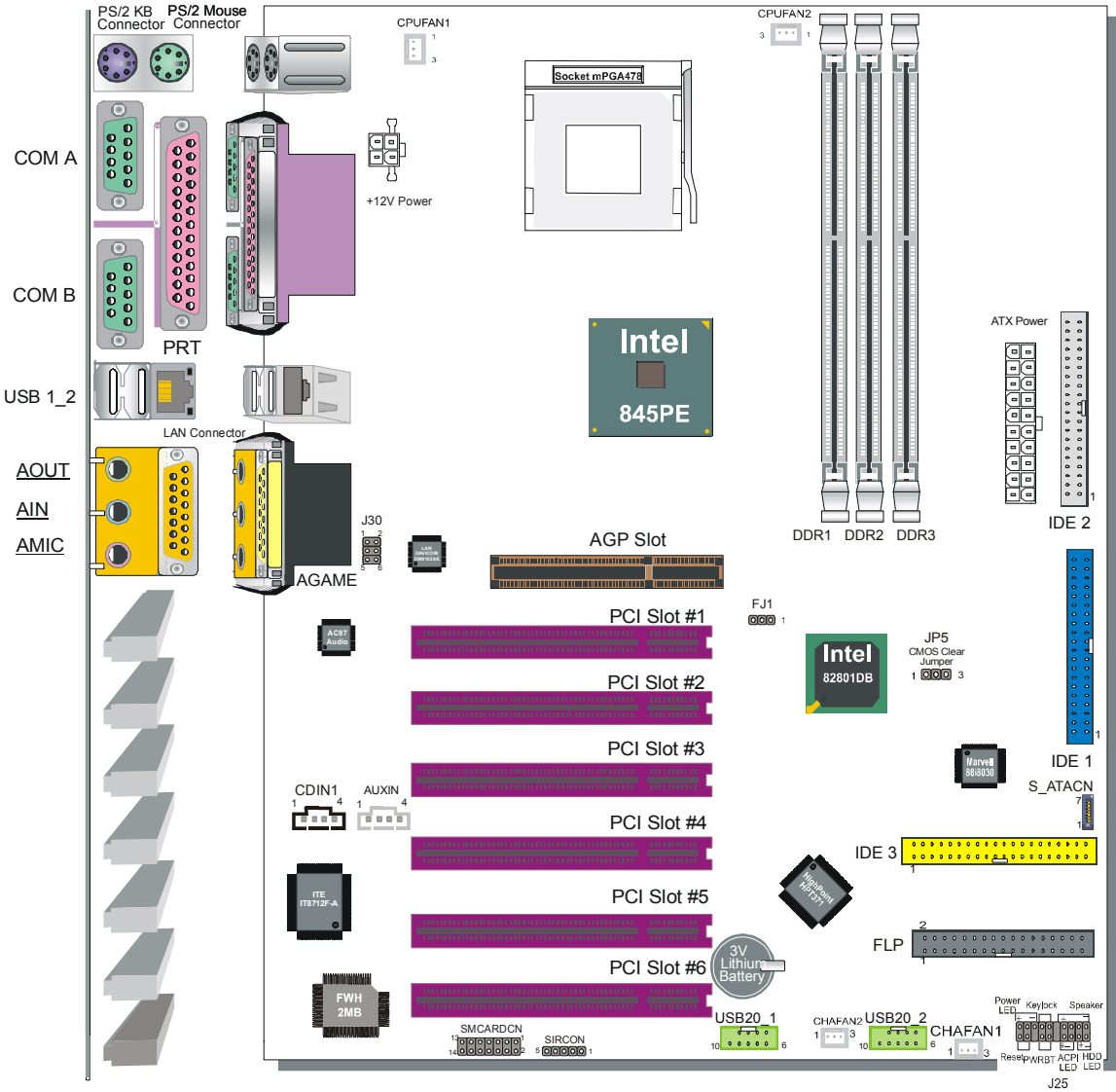
Key Features

➢ Supports Intel® mPGA Socket 478 processors
   - Pentium® 4

➢ Supports 533/400 MHz Front Side Bus Frequency

➢ PC99, ACPI

➢ Ultra 33/66/100 (ATA 33/66/100)

➢ Supports Wake-On-LAN (WOL)

➢ Supports PC1600/PC2100/2700 Unbuffer DDR Module

➢ 3 x DIMM slots for DDR SDRAM memory, max RAM side up to 2GB

➢ Supports ACPI Suspend Indicator

➢ Power-on by PS/2 Keyboard

➢ Power failure resume

➢ Supports Suspend to RAM

➢ Supports onboard hardware monitoring and includes Hardware Doctor™ utility

➢ Supports AC97 4 channel Codec

➢ Easy CPU settings in BIOS with the "SOYO COMBO Setup"
   - CPU voltage adjust
   - CPU ratio adjust
   - CPU FSB adjust
   - DDR SDRAM voltage adjust
   - AGP voltage adjust

➢ Supports multiple-boot function

➢ AGP 2.0 Compliant;
   AGP Connector supports:
   - 1.5V only AGP cards
   - 4X data transfer

➢ Smart Card Reader

   - Compliant with Personal Computer Smart Card (PC/SC) Working Group standard

   - Supports card present detect

   - Supports Smart Card insertion power-on feature

➢ 1 x 32-bit AGP slot

➢ 6 x 32-bit bus master PCI slots

➢ 6 x USB2.0 ports onboard

➢ 1 x IrDA port

➢ Support ATX 12V power

➢ HighPoint HPT371 1 channel

➢ Support Serial ATA 1 channel

➢ On-board 10/100 mbps NIC

2   *Installation*

To avoid damage to your Motherboard, please follow these simple rules while handling this equipment:

- Before handling the Motherboard, ground yourself by touching on to an unpainted portion of the system's metal chassis.

- Remove the Motherboard from its anti-static packaging. Hold the motherboard by the edges and avoid touching its components.

- Check the Motherboard for damage. If any chip appears to be loose, press carefully to seat it firmly in its socket.

Follow the directions in this section which is designed to guide you through a quick and correct method to install your new **SY-P4I845PE** Motherboard. For detailed information, please refer to the *SY-P4I845PE Motherboard User's Manual and Technical Reference* online manual on the CD-ROM that came with your Motherboard.

Gather and prepare all necessary components to complete the installation successfully:

◆ Socket mPGA478 processor with built-in CPU cooling fan (boxed type)

◆ DDR SDRAM module (s)

◆ Computer case with adequate power supply unit

◆ Monitor

◆ PS/2 Keyboard

◆ Pointing Device (PS/2 Mouse)

◆ Speaker(s) (optional)

◆ Disk Drives: HDD, CD-ROM, Floppy drive…

◆ External Peripherals: Printer, Plotter, and Modem (optional)

◆ VGA Card (AGP, PCI)

Install the Motherboard

We will now begin the installation process. Please follow the systematic procedure designed to lead you to a complete and correct installation.

Step 1 - Install the Central Processing Unit (CPU)

Step 2 - Install memory modules

Step 3 - Connect cables, case wires, and power supply Install expansion cards

Step 4 - Install expansion cards

Step 1. **Install the CPU**

CPU Mount Procedure: To mount the Pentium®4 Socket mPGA478 processor that you have purchased separately, follow these instructions.
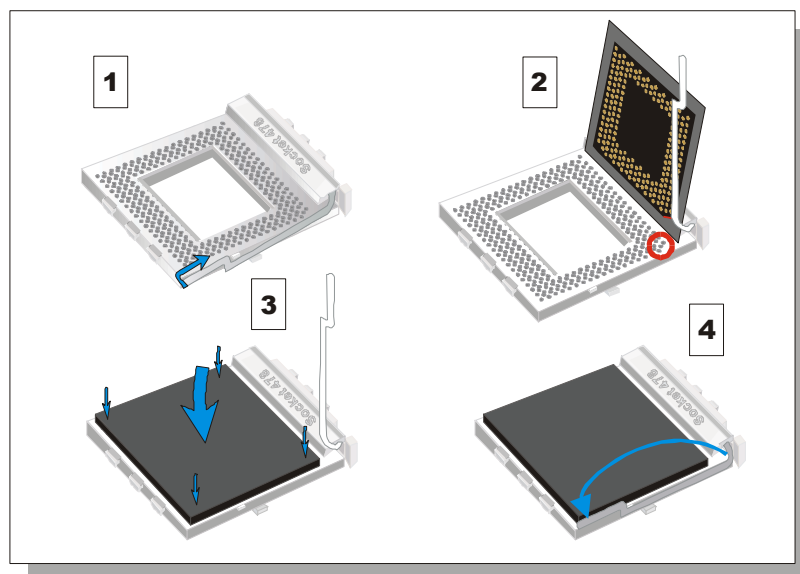
1.   Lift the socket handle up to a vertical position.

2.   Align the blunt edge of the CPU with the matching pinhole edge on the socket.

3.   Seat the processor in the socket completely and without forcing.

4.   Then close the socket handle to secure the CPU in place.
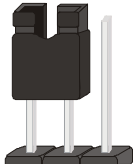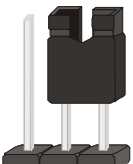
Remember to connect the CPU Cooling Fan to the appropriate power connector on the Motherboard. *The fan is a key component that stabilizes the system. It prevents the equipment from overheating and prolongs the life of your CPU.*

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FJ1 jumper (beside the AGP slot)

This jumper sets the default boot-up CPU frequency and the group of FSB frequencies that can be selected in the BIOS.

CPU FSB	100MHz FSB	Auto Detect FSB	133MHz FSB
FJ1 Jumper	3 2 1	3 2 1	3 2 1

Step 2. **Configure Memory**

This motherboard support PC2100 and PC2700, Non-ECC and non-registered module. ***The largest memory capacity possible is 2GB.*** On this motherboard, DRAM speed can be set independent from the CPU front side bus speed. ***A maximum of 2 pcs. Double-sided module can be used at the same time.***

Memory Configuration Table

DDR1	DDR2	DDR3
Double sided	Double sided	None
Double sided	Single sided	None
Double sided	Single sided	Single sided
Single sided	Single sided	none

Note: System must have 533MHz FSB CPU to have PC2700 memory support.

Step 3. **Connect cables, case wires, and power supply Install expansion cards**

This section tells how to connect internal peripherals and the power supply to the Motherboard.

The internal peripherals consist of IDE devices (HDD, CD-ROM), Floppy Disk Drive, Chassis Fan, Front Panel Devices (ACPI LED, Internal Speaker, Reset Button, IDE LED, and KeyLock Switch.), Wake-On-LAN card, VGA card, Sound Card, and other devices.

For more details on connecting internal and external peripherals to your new SY-P4I845PE Motherboard, please refer to *SY-P4I845PE Motherboard User's Manual and Technical Reference* online manual on the CD-ROM.

Connectors and Plug-ins

CPU Cooling Fan: CPUFAN1			CPU Cooling Fan: CPUFAN2		
Pin1	Pin2	Pin3	Pin1	Pin2	Pin3
GND	+12V	Sensor	GND	+12V	Sensor
Chassis Fan: CHAFAN1			Chassis Fan: CHAFAN2		
Pin1	Pin2	Pin3	Pin1	Pin2	Pin3
GND	+12V	Sensor	GND	+12V	NC

CD-IN 1				AUXIN1			
Pin1	Pin2	Pin3	Pin4	Pin1	Pin2	Pin3	Pin4
Left	GND	GND	Right	Left	GND	GND	Right

Standard IrDA (Infrared Device Header): SIRCON					MIC & LED Connector: J30					
Pin1	Pin2	Pin3	Pin4	Pin5	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6
VCC	None	IRRX	GND	IRTX	Line_Out_L	Line_Out_R	MIC IN	GND	LAN_LINK_LED	VCC

USB20_1								
Pin1	Pin2	Pin3	Pin4	Pin6	Pin7	Pin8	Pin9	Pin10
VCC	DATA-	DATA+	GND	VCC	DATA-	DATA+	GND	GND

USB20_2								
Pin1	Pin2	Pin3	Pin4	Pin6	Pin7	Pin8	Pin9	Pin10
VCC	DATA-	DATA+	GND	VCC	DATA-	DATA+	GND	GND

SMCARDCN													
Pin1	Pin2	Pin3	Pin4	Pin5	Pin6	Pin7	Pin8	Pin9	Pin10	Pin11	Pin12	Pin13	Pin14
VCC	NC	NC	NC	Scrfet	RST	CLK	NC	NC	Scrio	GND	Scrpres	NC	NC

Power LED			Key Lock	
Pin11	Pin12	Pin13	Pin14	Pin15
VCC	NC	GND	Control Pin	GND
Speaker			
Pin17	Pin18	Pin19	Pin20
VCC	NC	NC	Speaker out

HDD LED		ACPI LED		PWRBT		RESET	
Pin9	Pin10	Pin7	Pin8	Pin4	Pin5	Pin1	Pin2
LED Anode	LED Cathode	2.5V_DDR	Control Pin	Power On/Off	GND	Control PIN	GND

Power On/Off: PWRBT
Connect your power switch to this header (momentary switch type).   *To turn off the system, press this switch and hold down for longer than 4 seconds.*

ATX 12V Power Supply: ATX PW
Attach the ATX 12V Power cable to three connector. (This motherboard requires an ATX 12V power supply, an AT and ATX power supply can NOT be used.)   *When using the Power-On by PS/2 Keyboard function, please make sure the ATX power supply is able to provide at least 720mA on the 5V Standby lead (5VSB).*

PS. Power supply must be use ATX 12V specification.

A new superset of the original ATX power supply is now defined. Named "ATX 12V," this new power supply is comprised of a standard ATX unit plus the following enhancements:

● <u>Increased +12 VDC output capability</u>. Mother board components with unique voltage requirements are increasingly expected to be powered via DC/DC converters off the +12 VDC power supply output. This trend is due primarily to the higher power conversion and transmission efficiencies of +12 VDC relative to +5 VDC or +3.3 VDC. ATX12V power supplies should be designed to accommodate these increased +12 VDC current requirements and to address associated issues such as cross-regulation, capacitive loading, transient surge tolerance, cable voltage drop, and cooling.

● <u>New +12 V power connector</u>. To enable the delivery of more +12 VDC current to the motherboard, a new 4-pin receptacle/header combination–the + 12 V power connector–has been defined. **The presence of the +12 V power connector indicates that a power supply is ATX12V; the absence of the +12 V power connector indicates that a supply is ATX.**

Step 4. **Install expansion cards**

The motherboard has 1 AGP slot and 6 PCI slots.

1. Read the instruction document of the related expansion card before inserting the expansion card into the computer.

2. Press the expansion card firmly into expansion slot in motherboard.

3. Be sure the metal contacts on the card is seated in the slot.

4. Replace the screw to secure the slot bracket of the expansion card.

5. Install related driver from the operating system.
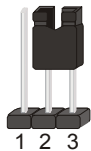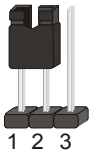
Note: **Only AGP card with 1.5 volts can be used in this M/B. Using 3.3 volts AGP card will damage your motherboard.**

CMOS Clear (JP5)

In some cases the CMOS memory may contain wrong data, follow the steps below to clear the CMOS memory.

1.   Clear the CMOS memory by momentarily shorting pin 2-3 on jumper JP5. This jumper can be easily identified by its white colored cap.

2.   Then put the jumper back to 1-2 to allow writing of new data into the CMOS memory.

CMOS Clearing	Clear CMOS Data	Retain CMOS Data
JP5 Setting	Short pin 2-3 for at least 5 seconds to clear the CMOS 1 2 3	Short pin 1-2 to retain new settings 1 2 3

Note: You must unplug the ATX power cable from the ATX power connector when performing the CMOS Clear operation.

Audio Speakers connections

When using 2 channel speaker, connect the speaker cable to line-out.

If you're using 4 channel speaker, connect **the front L/R speakers to line-out and rear L/R speakers to Line-in**. make sure to set the audio software for 4 channel speaker system. Don't forget to set the Audio Rack software to 4 channel system.

Line-out   Line-in
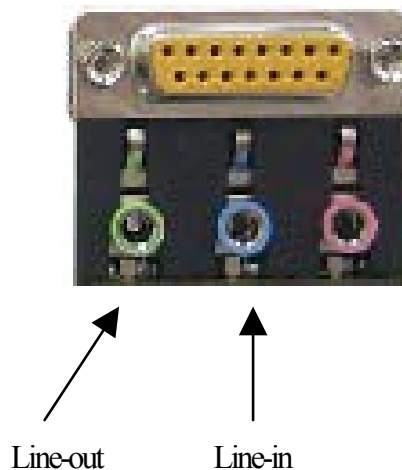
Highpoint HPT371 and Serial ATA port

Only one channel can be used at anytime, if you use the serial ATA port, you cannot use the IDE 3 connector or vice versa. If both channels are used, both devices will not be detected.

3 *Quick BIOS Setup*

This Motherboard does not use any hardware jumpers to set the CPU frequency. Instead, CPU settings are software configurable with the BIOS **[SOYO COMBO FEATURE].** The [SOYO COMBO FEATURE] combines the main parameters that you need to configure, all in one menu, for a quick setup in BIOS.

After the hardware installation is complete, turn the power switch on, then press the **<DEL>** key during the system diagnostic checks to enter the Award BIOS Setup program. The CMOS SETUP UTILITY will be shown on the screen. Then, follow these steps to configure the CPU settings.

Step 1. **Select [STANDARD CMOS SETUP]**
Set [Date/Time] and [Floppy drive type], then set [Hard Disk Type] to "Auto".

Step 2. **Select [LOAD OPTIMIZED DEFAULTS]**
Select the "LOAD OPTIMIZED DEFAULTS" menu and type "Y" at the prompt to load the BIOS optimal setup.

Step 3. **Select [SOYO COMBO FEATURE]**
Set the **[CPU Frequency Select]** field to "Auto", to set default Frequency.

Step 4. **Select [SAVE & EXIT SETUP]**
Press **<Enter>** to save the new configuration to the CMOS memory, and continue the boot sequence.

Quick BIOS
Setup

4 *The SOYO CD*

💡 **The SOYO-CD will Auto Run only in Windows Base Operating System.**

Your SY-P4I845PE motherboard comes with a CD-ROM labeled "SOYO CD". The SOYO CD contains

a. The user's manual for your new motherboard in PDF format,

b. The drivers software available for installation, and

c. A database in HTML format with information on SOYO motherboards and other products.

Step 1. **Insert the SOYO CD into the CD-ROM drive**

If you use Windows NT or 2000, the SOYO-CD will not detect your motherboard type. In that case the following dialog will pop up, please choose your motherboard and press OK. Now the SOYO-CD Start Up Menu will be shown.

```
Please Select Your Board                    ⊠

    ┌──────────────────────────────────┐
    │ P4I845PE                         │
    │                                  │
    │                                  │
    │                                  │
    │                                  │
    │                                  │
    └──────────────────────────────────┘

      ┌──────┐              ┌──────────┐
      │  OK  │              │  Cancel  │
      └──────┘              └──────────┘
```
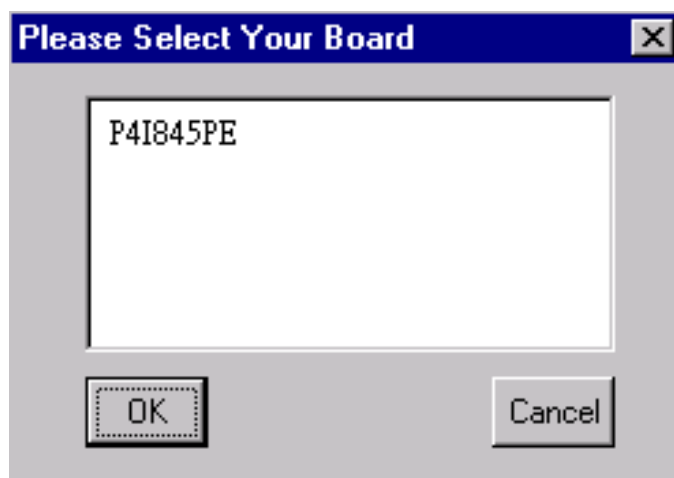
(SOYO CD Start Up Program Menu)

If you use Windows 95/98/98SE/ME, the SOYO CD Start Up Program automatically detects which SOYO Motherboard you own and displays the corresponding model name.

The SOYO CD

The user's manual files included on the SOYO CD are in PDF (Postscript Document) format. In order to read a PDF file, the appropriate Acrobat Reader software must be installed in your system.

Note: The Start Up program automatically detects if the Acrobat Reader utility is already present in your system, and otherwise prompts you on whether or not you want to install it. You must install the Acrobat Reader utility to be able to read the user's manual file. Follow the instructions on your screen during installation, then once the installation is completed, restart your system and re-run the SOYO CD.

Step 2.   Install Drivers and Utilities

Click the *Install Drivers* button to display the list of drivers software that can be installed with your Motherboard. The Start Up program displays the drivers available for the particular model of Motherboard you own. We recommend that you only install those drivers.

The SOYO CD

driver	revision:
Intel Chipset Software Installation Utility for Win 98/98SE/ME/2000/XP **Intel Application Accelerator for Win 98/98SE/ME/NT/2000/XP** **C-MEDIA Audio Driver/Application for Win 9x/ME/2000/NT/XP** **P4I845PE hardware monitor for Win 9x/ME/2000/NT/XP** **Davicom Onboard Lan Driver Installation (click here for installation procedure)** **HighPoint371 Raid & Ultra Driver Installation (click here for installation procedure)** **HighPoint371 Utility for Win 9x/ME/2000/NT/XP** **ITE SIM Card reader Driver/Utility for Win 9X/ME/NT/2K/XP**	

Cancel   OK

(Driver Installation Menu)

A short description of all available drivers follows:

➢ **Intel Chipset Software Installation Utility for Win 98/98SE/ME/2000/XP**

Windows 95 and 98 will not recognize the new INTEL 845PE chipset properly. To update the necessary .inf files that will help Windows recognize the 845PE chipset, please run this utility.

➢ **Intel Application Accelerator for Win 98/98SE/ME/NT/2000/XP**

The Intel(R) Application Accelerator is designed to improve performance of the storage sub-system and overall system performance. This software delivers improved performance through several ingredient technologies(components). Certain components will be available only on Pentium(R) 4 processor-based systems running Microsoft* Windows* 2000 Professional. Software installation is flexible and fully automated for Microsoft* Windows* 98, Windows 98 Second Edition(SE), Windows* 98 Millennium Edition(Me), Windows NT* 4.0, and Windows 2000 operating systems.

➢ **C-MEDIA Audio Driver/Application for Win 9x/ME/2000/NT/XP**

1. The driver supports 2/4 speakers 3D positional audio.

2. The application is include *CD Player/MIDI Player/MP3/Wave Player/Mixer* with the control over your PC's audio functions.

➢ **P4I845PE ITE hardware doctor for Win 9x/ME/2000/NT/XP**

Your motherboard comes with a hardware monitoring IC. By installing this utility Temperature, Fan speed and Voltages can be monitored. It is also possible to set alarms when current system values exceed or fall below pre-set values.

➢ **HighPoint371 Utility for Win 9x/ME/2000/NT/XP**

The RAID Administrator utility is used to monitor or perform maintenance on a RAID Administrator Mirror (RAID 1), Stripe (RAID 0). Visual messages are available to warn of possible problems with the disk array or controller.

➢ **ITE SIM card reader Driver/Utility for Win 9X/ME/NT/2K/XP**

The SOYO CD

If you have reader card, it must be installed.

Select which driver you want to install and click *OK,* or click *Cancel* to abort the driver installation and return to the main menu.

Note : Once you have selected a driver, the system will automatically exit the SOYO CD to begin the driver installation program. When the installation is complete, most drivers require to restart your system before they can become active.

Step 3. **Check the Latest Releases**

Click the 'Connect to SOYO website' button to go the SOYO Website to find the latest BIOS, manual and driver releases for your motherboard. This button will only work if your computer is connected to the internet through a network or modem connection. Make sure to get your modem connection up before clicking this button.

The SOYO CD

5 *Davicom Onboard LAN Driver Installation*

Installing the Davicom Onboard LAN Drivers under Windows 98SE

1. Move the cursor to my computer icon.

2. Click mouse right button then select "properties".

3. Click "Device Manager", then click "other devices".

4. Select "PCI Ethernet net Controller", then Double click it.

5. You will see the "Driver" item above this windows, then click it.

6. Click on "Update Driver".

7. Click on "Next".

8. Select the following directory.

9. The directory is in SOYO CD "d:\LAN\Davicom" (where D: is your CD-ROM) then click ok and you will need windows 98 second Edition CD to complete the installation, put it in your CD-ROM.

10. After informing windows of the driver directory the driver will be installed Restart your system after installation.

Installing the Davicom Onboard LAN Drivers under Windows ME

1. Move the cursor to my computer icon.

2. Click mouse right button then select "properties".

3. Click "Device Manager", then click "Network adapters".

4. Select "PCI Ethernet Controller", then Double click it.

5. You will see the "Driver" item above this windows, then click it.

6. Click on "Update Driver".

7. Click on "Next".

8. Select the following directory.

9. The directory is in SOYO CD:" D:\LAN\Davicom" (where D: is your CD-ROM) and click ok.

10. After informing windows of the driver directory the driver will be installed Restart your system after installation.

Installing the Davicom Onboard LAN Drivers under Windows NT

1. Double click the Network icon in the control panel then click "Yes".

2. Click on "Next".

Davicom
Onboard LAN
Driver

3. Click on "Select from list".

4. Click on "Have Disk".

5. The install Driver dialog box will appear and request the path of the location of the drivers to be installed. Enter "D:\LAN\Davicom" (where D: is your CD-ROM) then press "ok".

6. You will need the Windows NT CD to complete the installation.

7. After informing Windows NT will display a dialog box asking your to restart your system, click "Yes" right now.

Installing the Davicom Onboard LAN Drivers under Windows 2000

1. Move the cursor to my computer icon.

2. Click mouse right button then select "properties".

3. Select "Hardware" item, click it.

4. Select "Device Manager", click it.

5. Under other device you will see a yellow Mark, then Double click "Ethernet controller".

6. Click on "Reinstall Driver".

7. Click on "Next".

8. Click on "Next".

9. The LAN driver directory is in SOYO CD "d:\LAN\Davicom". (where D:\is your CD-ROM)

Installing the Davicom Onboard LAN Drivers under Windows XP

(Because Windows XP can detect Davicom LAN driver automatic, so this installation is for update LAN driver)

1. Move the cursor to my computer icon.

2. Press mouse right button select "properties", then click it.

3. Click "Hardware", then click Device Manager".

4. Double click "Network adapter".

5. Double click "DAVICOM 9102-Based PCI Fast Ethernet Adapter".

6. Click "Driver"

7. Click "Update Driver".

8. Select "Install from a list or specific locations", click it.

9. Click on "Next".

10. Click "Browse".

11. The LAN driver directory is in SOYO CD "d:\LAN\Davicom" (where D: is your CD-ROM), then press "ok".

6 *Highpoint hpt371 Driver Installation*

Installing Driver on an Existing System

9x/ME Manual Installation

If Windows can not find new hardware, the driver can be installed through the following steps:

1. Shut down all programs.
2. Click **Start**–>**Setup**–>**Control Panel**, then double-click on **Add New Hardware** icon.
3. Click **Next** in the popup window to continue.
4. A dialog box will appear and ask whether to let windows search new hardware. Select **No, I want to select the hardware from a list**, and then click **Next** to continue.
5. Hardware's of different types will be shown in the follow-on window. Select **SCSI Controllers** and then click **Next** to continue.
6. Insert the floppy disk of driver into the floppy drive, then click **Have Disk....**
7. A dialog box will pop up, input the path of driver **SOYO CD:\Raid\Hpt371\121\Win98_ME**.Then click **OK** to continue.
8. In the follow-on window, driver will list out the controller type you need to install, please just click **Next** to continue.
9. Follow the system prompt to install driver. When finished, restart the computer.

Windows NT 4.0

1. Click **Start**–>**Setup**–>**Control Panel**, then double-click **SCSI Adapter** icon.
2. In the follow-on window, select **Driver** item, then click **Add** button.
3. In the follow-on window, select **Have Disk....**
4. Insert the Soyo cd of driver, input the path of driver **D:\Raid\Hpt371\121\WinNT**, then click **OK.**
5. In the follow-on window, select **HPT371 UDMA/ATA133 Controller** item, then click **OK.**
6. Follow the system prompt to install the driver. When finished, re-start the computer.

Windows 2000

1. Click **Start**–>**Setup**–>**Control Panel** –> Switch to classic View → system → hardware → device manager.
2. You will see a "! RAID Controller" under unknown device
3. Double click "! RAID controller"
4. Re-install driver
5. Choose "search for a suitable driver…."
6. Insert SOYO Driver CD, click next
7. During installation, Win 2K will prompt you to insert the RAID driver diskette
8. Browse to the directory that contains the missing file (D:\raid\hpt371\121\Win2000).
9. Follow the system prompt to finish the installation, and restart the computer.
10. After restart, Win 2k will detect "HPT RCM device"
11. Choose "search for a suitable driver….", click next
12. Follow the system prompt to finish the installation.

Windows XP

1. Click **Start**–>**Setup**–>**Control Panel** –> Switch to classic View → system → hardware → device manager.
2. You will see a "! RAID Controller" under unknown device
3. Double click "! RAID controller"
4. Re-install driver
5. Choose "install from a list or specific location"
6. Check "search removable media ….." and then click next
7. Choose the driver for Win XP
8. During installation, Win XP will prompt you to insert the RAID driver diskette
9. Browse to the directory that contains the missing file (D:\raid\hpt371\121\Winxp). If you click yes without browsing, Win XP will not find the .inf file
10. Follow the system prompt to finish the installation, and restart the computer.

Highpoint
hpt371 Driver
Installation

Installing Driver During OS Installation

Install driver during Windows NT4.0 installation

1. **Go to "d:\raid\hpt371\121\" directory, (assuming that your CD-ROM is drive d) copy all the files and directory to a floppy disk.**
2. Press **F6** key when the system prompts **Setup is inspecting your computer's hardware configuration.**
3. Press **F6** key, the installation will continue. Later, installation program will remind user to press **S** key to specify other devices. Please press **S** key.
4. In the follow-up **Device Type** window, select **Other** item, then press **Enter** to confirm.
5. The installation program will prompt users to insert the floppy disk of driver. Please insert it and then press **Enter** to confirm.
6. In the follow-on window, select **HPT371 UDMA/ATA133 Controller**, then press **Enter** to confirm.
7. The follow-on interface will list the devices to be installed, in which **HPT371 UDMA/ATA133 Controller** item should be included. (If users want to install other devices, please operate at this time. If all devices have been successfully installed, please go to next.)
8. Press **Enter** to continue the installation of Windows NT4.0.

Install driver during Windows 2000 installation

1. **Go to "d:\raid\hpt371\121\" directory, (assuming that your CD-ROM is drive d) copy all the files and directory to a floppy disk.**
2. If Windows 2000 is installed from the floppy drive, please let the installing program run automatically. If Windows 2000 is installed from the CD-ROM drive, please **F6** key when the message **Press F6 if you need to install third party SCSI or RAID driver** appears.
3. Press **S** key to specify additional devices when the **Windows 2000 Setup** window appears.
4. Insert the floppy disk of driver, then press **Enter** to continue.
5. The system will ask whether to install driver under **WinNT** or under **Windows 2000**, please select to install driver under **Windows 2000.**
6. In the follow-on window of device type, please select **Other** and press

Enter to continue.

7. The follow-on interface will list the devices to be installed, in which **HPT371 UDMA/ATA133 Controller** item should be included (If users want to install other devices, please operate at this time. If all devices have been successfully installed, please go to next.)

Install driver during Windows XP installation

1. **Go to "d:\raid\\hpt371\121\" directory, (assuming that your CD-ROM is drive d) copy all the files and directory to a floppy disk.**

2. Booting from CD-ROM, when the **Windows XP Setup** blue screen appear and prompt user to press F6 key to install third party SCSI or RAID driver, please press F6 Key.

3. Press **S** key to specify additional devices when the **Windows XP Setup** window appears.

4. The system will ask whether to install driver under **WinNT** or under **Windows XP**, please select to install driver under **Windows XP.**

5. Insert the floppy disk of driver, then press **Enter** to continue.

6. In the follow-on window of device type, please select **HPT371 UDMA/ATA133 Controller for Windows XP** to continue.

7. Win XP will prompt you that a message that the driver is newer than the default driver, press S to continue.

8. The follow-on interface will list the devices to be installed, in which **HPT371 UDMA/ATA133 Controller** item should be included. (If users want to install other devices, please operate at this time. If all devices have been successfully installed, please go to next.)

9. Press ENTER to continue Windows XP setup.

7 *Serial-ATA Driver Installation*

Win 98SE/2000/XP installation

1. Serial-ATA chip will be automatically detected after installing Highpoint371 driver.

Quick Trouble shoot tips

Boot-up Issues

The system do not power-up, no beeping sound heard and the CPU fan does not turn on.

1. Check if the power cord is plug to the power source.
2. Check if the power is connected to the M/B.
3. Check if the cable of the case power button is connected to the M/B power button connector (see connectors and plug-ins in the manual for more info).
4. Make sure the power supply is not defective. Change the power supply. The minimum should be 250 watts.
5. Remove the M/B from the case and test the system. The M/B might be shorted to the case.

The system power-up, no video, no beeping sound heard, but the CPU fan is turning.

1. Clear CMOS battery. (JP5 connector, see Quick start guide for more info on how to clear the CMOS).
2. Check all the jumper settings on the M/B. (if the M/B have any).
3. Check if the CPU is ok by using another CPU (check the Quick start guide for CPU supported on this M/B).
4. Check if the power supply is ok. The minimum should be 250 watts.
5. Make sure the CPU fan is connected to CPUFAN1 connector.
6. Remove the M/B from the case and test the system. The M/B might be shorted to the case.
7. Change the VGA card. If you have used a 3.3V AGP card, the M/B might be damage.

The system power-up, no video, beeping heard.

1. Clear CMOS battery. (JP5 connector, see Quick start guide for more info on how to clear the CMOS).
2. Check all the jumper settings on the M/B. (if the M/B have any).
3. Check the memory module and the VGA card if inserted properly on the M/B.
4. If yes, change the memory module, it might be defective. Make sure the memory specification is supported by the M/B. (for more info on this, check our FAQ website).
5. Change the VGA card. Make sure the AGP card is 1.5v

The system turns on for some seconds then shutdown by itself.

1. Check if the CPU fan is connected to the CPUFAN1 connector.
2. The CPU might be overheating. Check the CPU FAN if it is defective or see if the CPU fan is in contact with the CPU.
3. Clear CMOS battery. (JP5 connector, see Quick start guide for more info on how to clear the

CMOS).

4. Make sure the power supply you have on your system support the M/B specification. Example. If you have a P4 M/B, you need to use a P4 power supply.

5. If you already checked the power supply specification, change the power supply it might be defective. The minimum is 250 watts.

When I boot up my system, everything works fine, it sees my CPU and memory, detects my hard drive, floppy drive and CD-ROM but locks up at "Verify DMI pool data... ". Don't go any further. What should I do?

1. Clear CMOS battery. (JP5 connector, see Quick start guide for more info on how to clear the CMOS).

2. If still has the problem, remove all other add-on cards except video card see if it move further. Then put peripherals in one by one to identify which one cause the lockup.

3. Change the CPU.

During Boot-up, my computer says CMOS memory Checksum error. What is the problem?

1. Clear CMOS memory.

2. Re-flash BIOS. Check on how to flash BIOS on the later part of this book.

3. Change the CMOS battery, the battery might be drained.

4. The BIOS chip might be failing.

Stability Issue

My system intermittently locks up, very unstable

1. Check the CPU Temp, it might be overheating. Change the CPU FAN.

2. Do not over clock your CPU

3. Check the specification of the memory module, maybe the M/B do not support it.

4. Go to BIOS setup and load fail safe settings. Please check if the system performance in the BIOS setup is set to Turbo/Maximum.

5. Check website for latest BIOS update.

6. Check website for FAQ's regarding instability issue.

7. Change the memory module or CPU.

8. The power supply might not have enough wattage to support all the peripherals. If your system has other peripherals connected, like CD-RW, extra HDD, etc. disconnect them.

9. Install Intel Inf driver.

My system intermittently locks up, during Windows installation.

1. Go to BIOS and load "load optimized default".

2. Check website for any BIOS update.

3. If still has the problem, remove all other add-on cards except CPU/ Memory/ Video card/Hard disk. See if you can finish Windows installation. Then put peripherals in one by one to identify which one cause the lockup.

BIOS Issue

Where can I find the BIOS revision of my mainboard?

It will be displayed on the up-left corner on the screen during boot-up. It will show as your board type followed by the revision number, such as kvxa_2BA1 (meaning BIOS revision 2BA1 for the SY-K7V Dragon plus! board) or 6BA+IV_2AA2 which means SY-6BA+IV motherboard with 2AA2 BIOS.

Where can I find the latest BIOS of my motherboard?

Please go to the technical support page of one of the SOYO websites (Taiwan: www.soyo.com.tw), and look up your motherboard to find the latest BIOS revision.

How can I flash the BIOS?

1. Download the BIOS on our support website.

2. Make a bootable floppy disk with out any memory manager loaded (i.e. himem, emm386, etc…).

3. Copy the BIOS file and awdflash utility to the diskette.

4. Type "awdflash biosname.bin /sn /py".

5. Then reboot.

After flashing the BIOS, my system will not boot-up.

1. Try clearing the CMOS.

2. The BIOS chip is defected due to unsuccessful flash, contact your nearest SOYO branch for re-flashing.

Is there a way to reprogram my BIOS after an unsuccessful flash?

No other way, you need to send back the BIOS ROM to your nearest SOYO branch for re-flashing.

I'm using a 533MHz FSB CPU, I cannot find the DDR 166MHz option in the BIOS, why?

The CPU used should be 133MHz FSB to have PC2700 support.

VGA Issue

I cannot set my VGA to go higher than 16 color (640x 480).

1. Make sure that you have installed the Intel Inf driver.
2. Install/ re-install the VGA driver.

After wake-up from Suspend to RAM or Standby mode, the screen has no display but I can hear the hard disk operating

1. Check the VGA card manufacturer for driver update, or make sure the VGA card support Suspend to Ram function.

Audio Issue

How can I disable the on-board Audio?

Go to the SOYO Combo Feature in the BIOS setup, then set the "onboard audio" to disable.

I cannot get the sound working on my system.

1. Check if the speaker wire is connected to the line out connector in the M/B.
2. Check if the speaker power is powered on.
3. Install the audio driver supplied on our driver disc.
4. Check BIOS setup if "onboard audio" is enabled.
5. If sound already installed, check our website for audio driver update.

The sound is working in my system, but when I play CD music from the CD-ROM, I do not get any sound. What is wrong?

This is because the 3-wire audio cable from the CD-ROM to the on-board CDIN1 connector in the M/B is not connected. See manual for location of CDIN1.

The sound from my sound card is distorted when Windows start. What is wrong?

If you are using an ISA sound card, please make sure the IRQ needed for the sound card is set to 'Legacy ISA' in the BIOS. In other word, if your ISA sound card takes IRQ5, then set IRQ5 to 'Legacy ISA'.

The sound and everything else works fine except that the recorder and microphone do not work. What is wrong?

1. Please go to sound properties and check if the recorder and microphone in the are enabled.
2. Check if Microphone is ok.

Hard disk/FDD/ CD-ROM issue

My Western digital HDD is not detected during boot-up

Change the jumper settings to cable select or single.

Sometimes the system finds my CD-ROM, sometimes not

1. Check CD-ROM if it is working properly.
2. The power supply might not have enough wattage to support all the peripherals. If your system has other peripherals connected, like CD-RW, extra HDD, etc. disconnect them.

When I boot up my new computer I got "floppy boot failure" and the LED on the floppy stays on

Make sure the red wire of floppy ribbon cable goes to Pin1 on the floppy drive side (don't trust the "key lock" or "notch") and use the end-connector of the cable (don't use middle one).

RAID issue

Windows do not detect the on-board RAID.

1. Enable the on-board RAID function in the BIOS.

2. install the RAID driver, see chapter 6 for more info

Can I use my CD-ROM or other IDE device (except HDD) on IDE 3 & 4?
No, HPT 371 only support Hard disk.

Can I use IDE 3 as a normal IDE channel?

Yes, no need to change any settings in the BIOS. Just make sure to install the driver, check Chapter 6 for more info.

I cannot get the HDD to boot from IDE 3 why?

Make sure that the 1st boot device in the BIOS is set to SCSI.

Boot-up from my IDE3, I get blue screen upon entering Windows system

Make sure the raid option in the BIOS is enabled.

LAN Issues

During LAN driver installation, the system hangs on 75%, why?

Enable the onboard LAN in the BIOS setup.
I have problem installing Novell NetWare v.50

Disable the APIC option in the BIOS.

For updated FAQs, please check http://www.soyo.com.tw/faq.htm **or**
http://www.soyousa.com/faqs.html

How to contact us:

- ■ If you are interested in our products, please contact the SOYO sales department in the region you live.
- ■ If you require Technical Assistance, please contact our Technical Support in the region you live.

SOYO prefers Email as communication medium, remember to *always add to the email the country that you live in*.

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